THE UNITED SHOE MACHINERY COMPANY

The Supreme Court of the United States, in a notable recent opinion, affirming a judgment holding that two counts of an indictment failed to state a violation of the Sherman anti-trust act, rested its decision in favor of the defendants squarely upon the economic character of their business. The Court said:

> On the face of it the combination was simply an effort after greater efficiency . . . . We can see no greater objection to one corporation manufacturing 70 per cent of three non-competing groups of patented machines collectively used for making a single product than to three corporations making the same proportion of one group each. The disintegration aimed at by the statute does not extend to reducing all manufacture to isolated units of the lowest degree. It is as lawful for one corporation to make every part of a steam engine and to put the machine together as it would be for one to make the boilers and another to make the wheels. Until the one intent is nearer accomplishment than it is by such a juxtaposition alone, no intent could raise the conduct to the dignity of an attempt.[1]

The company thus described by the Supreme Court is the United Shoe Machinery Company. While various legal phases of this company are being litigated in the courts, its economic significance, which the Supreme Court brought so strongly into view, may appropriately be examined and assigned its place in the economics of industrial organization.

I

Shoe machinery began with the McKay sole sewing-machine in 1860.[2] In the shoe sewed on the McKay machine the thread ran through into the inside of the inner sole, leaving a rasping ridge on which the stocking of the wearer rubbed. The McKay shoe displaced only the coarser grades. The hand-sewed shoe remained the favorite of wealth and fashion, and was worn exclusively by those who cared for comfort and could afford the price. In sewing a shoe by hand, a thin and narrow strip of leather, called a welt, is first sewed to the insole and upper, and the heavy

[1] *United States* v. *Winslow*, 227 U.S. 202, 217, 218, February 3, 1913.

[2] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 126.

outsole is sewed to this welt, so that the stitches come outside and do not touch the foot, the insole being left entirely smooth. It is a delicate operation by hand, and many years elapsed before a machine was contrived by which it could be done. At last the Goodyear welting and stitching machines appeared—so named for Charles Goodyear, who financed and perfected them, a son of the man who invented the vulcanization of rubber. These two machines are the nucleus of the Goodyear welt system to which must be attributed the revolution of the shoe manufacturing industry.[1]

To sew a pair of shoes by hand cost for good work not less than seventy-five cents per pair, while with the McKay machine the cost was reduced to about three cents per pair.[2] The hand labor cost of sewing the welt and stitching the sole on a pair of shoes was from 60 to 75 cents. The original Goodyear machines were put out on the theory that this manufacturing cost should be reduced to 10 cents per pair, of which 4 cents would be for the use of the machines and 6 cents for the labor.[3]

One after another, machines were devised for shaping, compressing, and nailing heels; for attaching soles to uppers in heavy shoes by wooden pegs or copper screws and wires; for rounding, buffing, and polishing the soles; for trimming and setting the edges of the sole; for performing innumerable operations, some seemingly trivial, but all essential to perfection in comfort, durability, or style. With every new machine the question arose: Shall it be sold or put out on lease? And if leased, what royalty shall be charged?

From the outset, shoe machinery was most frequently put out on lease. Shoe manufacturers were disinclined to tie up their capital in expensive machinery bought outright, and preferred leases providing for royalty payments based on the number of shoes turned out by the machines.[4]

[1] *Encyclopaedia Britannica*, 11th ed., XXIV, 992, 994.

[2] "Modern Shoe-Making," *Boot and Shoe Recorder*, July 23, 1884.

[3] Alfred W. Donovan, *Shoe Machinery Analyzed*, 1912, p. 53.

[4] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 136–37, 139, 140.

Manufacturers whose machines were already widely leased to shoe manufacturers hit upon the plan of offering new accessory machines upon nominal rentals, upon condition that such accessory machines be used only in connection with the machines on which the shoe manufacturers already were paying royalties.[1] The Goodyear Shoe Machinery Company, for example, developed a leveling machine, which they might have sold outright for a round price, or might have leased on a royalty basis. Instead, the company leased the leveling machine for nothing to shoe manufacturers who agreed to use it only upon shoes welted or stitched on the Goodyear machines.[2]

This plan of leasing "tied" machines became immediately popular with both the shoe manufacturers and the machinery manufacturers. It broadened the market for shoe machinery. It substantially reduced the royalty charge upon the more expensive machines. It minimized the labor of keeping account of royalties. It insured perfect mechanical correlation in the sequence of machines composing the successive links in the chain of shoe manufacture. It encouraged machinery manufacturers to develop a systematic service for keeping in good repair and in perfect running order, in their customers' factories, their leased machinery whose output was the single source and absolute measure of all their profits.[3] More than anything else, it transformed the shoe machinery business from the manufacture and marketing of shoe machinery into the manufacture and supplying of "shoe-production-service."

II

Long before the organization of the United Shoe Machinery Company, in 1899, the concomitant features of "tied" leases and machinery "service" were the distinguishing characteristics of the shoe machinery business.[4]

[1] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 137–38; Senate Interstate Commerce Committee Hearings, January, 25, 26, 27, 29, 30, 31, 1912, p. 2161.

[2] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, p. 137.

[3] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 111–27.

[4] House Judiciary Committee Hearings, February 20, 21, 22, and March 1, 1912, p. 154.

Shoe manufacturing had become a highly complicated industry. In making Goodyear welt shoes, one hundred and eighty-five distinct operations were necessary, of which one hundred and fifty-seven were machine operations.[1] Few machines could perform more than one or two of these operations. In every shoe factory, therefore, a great many different machines had to be assembled, adjusted to work in absolute harmony, and kept in perfect operation.[2] If any machine broke down or got out of adjustment, the industrial chain was broken, and all the machinery in the factory had to stand idle until the broken link was restored. The shoe manufacturer, consequently, was always at the mercy of his weakest machine. His product was always limited by the delay and inadequacy of the service furnished by the weakest manufacturer from whom he obtained machinery. Every other machinery manufacturer, whose machines were prevented from earning royalties during this enforced idleness, was also a sufferer. He, no less than his customer, was always at the mercy of the weakest machines in his customer's factory. His royalties from his machines were always limited by the delay and inadequacy of the service which his competitor furnished to their common customer.

Such instability could not endure. Breakdowns multiplied;[3] repair bills became intolerable;[4] continuous operation was never certain;[5] production costs could never be predicted;[6] promises of definite deliveries could not be fulfilled;[7] machines bought outright soon became worthless;[8] large customers demanded and frequently

[1] *Congressional Record*, May 12, 1911, p. 1164.

[2] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 117.

[3] Senate Interstate Commerce Committee Hearings, January 13, 15, 16, 1912, Part XXI, p. 1852.

[4] *Congressional Record*, May 12, 1911, p. 1166.

[5] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 6–7, 16, 49, 65, 69.

[6] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 47, 65–66; Senate Interstate Commerce Committee Hearings, January 13, 15, 16, 1912, Part XXI, pp. 1853–56.

[7] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 48–49, 53, 65–66.

[8] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, p. 80.

obtained rebates over their smaller competitors;[1] enforced idleness caused by inefficient machinery service resulted in frequent turmoils of factory operatives;[2] an up-to-date shoe factory involved such large, unforeseeable outlays as to become almost a financial impossibility.[3]

Some of the smaller concerns went out of business. Gradually, the making of machinery for the "bottoming" operations in shoe manufacture centered in three groups. To quote the Supreme Court of the United States in the decision above cited (*United States* v. *Winslow*, 227 U.S. 202, 215):

> Before and up to February 7, 1899, the defendants Winslow, Hurd, and Brown, through the Consolidated and McKay Lasting Machine Company, under letters patent, made 60 per cent of all the lasting machines made in the United States; the defendants Barbour and Howe, through the Goodyear Shoe Machinery Company, in like manner made 80 per cent of all the welt-sewing machines and outsole-stitching machines, and 10 per cent of all the lasting machines; and the defendant Storrow (against whom the indictment has been dismissed), through the McKay Shoe Manufacturing Company, made 70 per cent of all the heeling machines and 80 per cent of all the metallic fastening machines made in the United States.

Why these groups came together in the United Shoe Machinery Company has been variously explained. The government in the case above cited contended that the purpose was to monopolize and restrain trade in shoe machinery. The Supreme Court, however, in the passage from its opinion quoted at the beginning of this paper, declared that "on the face of it the combination was simply an effort after greater efficiency." Mr. Louis D. Brandeis has expressed the same idea. "These companies," said Mr. Brandeis, "found that, for the proper conduct of the business, it was desirable that the business should not be confined to any particular department, but that it should include a number of

[1] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 15, 102; Senate Interstate Commerce Committee Hearings, January 25, 26, 27, 29, 30, 31, 1912, pp. 2159–60; House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 115.

[2] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 47–48.

[3] Senate Interstate Commerce Committee Hearings, January 13, 15, 16, 1912, Part XXI, p. 1852.

departments; that there was an immense amount of expense and an immense amount of friction, which necessarily resulted from any division in regard to a large part of this machinery."[1] Mr. Brandeis should know for he was active in several of the constituent companies before the consolidation,[2] and was a director and legal adviser of the United Shoe Machinery Company for nearly eight years after its organization.[3]

Whatever be the reasons, those groups united. "On February 7, 1899," said the Supreme Court of the United States in the decision above quoted (*United States* v. *Winslow*, 227 U.S. 202, 216), "the three groups of defendants above named, up to that time separate, organized the United Shoe Machinery Company and turned over to that company the stocks and business of the several corporations that they respectively controlled."

III

The president of the United Shoe Machinery Company, in 1911, described its work:

> The number of machines [of the United Shoe Machinery Company] on lease in the United States on March 1, 1911, was 90,276.[4] . . . . During the year the company brought in from shoe factories over 4,000 of its machines, which were broken up and thrown on the scrap heap in order that they might be replaced with machines embodying the latest improvements—an expense which the company assumes under its present system of doing business, but which would otherwise have to be borne by the shoe manufacturers. . . . . The company from the beginning has expended large sums of money in developing all types of machines in that department of shoe manufacturing to which it gives especial attention—confined chiefly to machines used in the "bottoming room." It has placed the perfected results of its experiments at the disposal of shoe manufacturers under terms which enable the manufacturer to equip his factory with a greater variety of the most advanced type of machines than was possible at the time of the organization of the company, and at a smaller cost to him per pair of shoes than he was called upon to pay

[1] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 122.

[2] See *Ibid.*

[3] Senate Interstate Commerce Committee Hearings, January 17, 18, 19, 1912, Part XXII, p. 1957.

[4] On March 1, 1913, according to the president of the United Shoe Machinery Company, the company had on lease in the United States 98,516 machines, "Report of the President to the Annual Meeting, 1913," p. 6.

at that time for the use of fewer machines. The only important item of cost in the construction of a shoe which has not increased during the twelve years since the company was formed is the item of machinery. The shoe manufacturer pays less per pair of shoes for his machinery equipment than ever before, although the cost of leather and labor and almost everything about a shoe which the company does not provide is higher; and the company itself in most instances pays more for what it has to buy.

The amounts paid per pair of shoes for the use of all the principal royalty machines furnished by this company for the manufacture of different classes of shoes when accounts are paid within 30 days are substantially as follows:

Goodyear welts, men's work	$0.05694
Goodyear welts, women's work	.04694
Goodyear turn shoes, women's and misses'	.01972
Children's Goodyear turn shoes	.005
Men's and women's McKay shoes	.01746
Children's McKay sewed shoes	.01391

From the royalties for "Goodyear welts" and "Goodyear turns" should be deducted six-tenths of a cent per pair for men's Goodyear welts; for women's Goodyear welts, forty-five one-hundredths of a cent; and for women's and misses' Goodyear turns, seventy-five one-thousandths of a cent, which is to be invested in stock of the corporation and given to lessees under the terms of a circular letter of the company to its lessees, dated June 10, 1910.

The foregoing royalties substantially cover everything which the company receives for the use of its principal machines from those manufacturers who use its machines in making Goodyear welt, Goodyear turn, or McKay sewed shoes. In return for the rentals and royalties which it receives, the company assumes the whole cost of invention, experimental work, development, manufacture, and depreciation of machines; the cost of unremitting care of the machines to keep them at the highest point of efficiency through its force of over 500 experts who devote their entire time to this service; the purchase of patents; and the cost of administration. That is to say, it assumes items of expense and risk which under any other system yet suggested the shoe manufacturer would be compelled to assume himself, thus subjecting his business to a higher machinery cost per pair of shoes than the average royalty he now pays. The metallic machines which insert slugs, nails, and wire in heels or soles are placed in factories by the company without charge to the shoe manufacturer and the only return to the company is from the indirect royalty, averaging, in the case of Goodyear welts, turns, and McKays, less than one-half of a cent per pair of shoes, which is included in the foregoing royalties and is calculated from the difference between the cost to the company of the material used with the machines and the price which the manufacturer pays the company for his material. . . . The company now makes

over 300 different machines, some of which are leased to manufacturers, many of which are sold outright, and most of which can be either leased or purchased as the shoe manufacturer may prefer.[1]

IV

In 1906, a bill was introduced in the Massachusetts legislature providing that—

no person, firm, corporation, or association doing business in this commonwealth shall make it a condition of a sale or lease of machinery that the purchaser or lessee shall not buy, lease, or use the machinery of any other person, firm, corporation, or association when such machinery is protected by letters patent of the United States, or offer unreasonable discounts or other advantages which shall be virtually prohibitive of the purchase, lease, or use of such machinery of other persons, firms, corporations, or associations: *Provided*, That nothing in this act shall be construed to prohibit the appointment of agents or sole agents for the sale or lease of machinery.[2]

At hearings held before the legislative committee, this bill was opposed by a great many shoe manufacturers and also by the United Shoe Machinery Company.[3] The bill failed of passage. Next year, however, a similar bill was enacted.[4] Thereupon the United Shoe Machinery Company attached to all its leases a rider providing that "any and all agreements, stipulations, provisions, and conditions hereinbefore printed in this instrument which are in violation of the provisions of Chapter 469 of the Acts of the General Court of Massachusetts for the year 1907, if there are any

[1] *Report* of the President to the Annual Meeting, 1911. House Judiciary Committee Hearings, January 26, 27, February 10, 1912, pp. 192–93.

[2] Senate Interstate Commerce Committee Hearings, February 24, 28, 1912, Part XXX, p. 2616.

[3] Among the opponents of the bill were Mr. Louis D. Brandeis, then director of the United Shoe Machinery Company, Mr. Charles H. Jones, president of the Commonwealth Shoe and Leather Company, and Mr. W. H. McElwain, president of the W. H. McElwain Company, whose statements and arguments against the bill are collected in House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 120–27; Senate Interstate Commerce Committee Hearings, January 17, 18, 19, 1912, Part XXII, pp. 1958–78; House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 108–10; Senate Interstate Commerce Committee Hearings, February 24, 28, 1912, Part XXX, pp. 2616–17.

[4] Acts of 1907, Chapter 469, quoted in House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 72.

such, are hereby stricken out before execution and are not agreed to nor made a part of this contract."[1]

In 1911, a number of shoe manufacturers took up the agitation for a modification of their shoe machinery leases. They organized the Shoe Manufacturers' Alliance in order, as they stated, "to secure a change in the methods now pursued by the United Shoe Machinery corporation, which today in effect monopolizes the shoe machinery business in this country through its system of leases with 'tieing' clauses, under which shoe manufacturers are now compelled to operate."[2]

These shoe manufacturers have rested their economic case upon the following propositions:

1. That the most essential, or most important, machines of the United Shoe Machinery Company, from which it derives its greatest income from rentals, duplicate parts, and repairs, etc., are the machines for welt sewing, outsole stitching, lasting, heeling, heel slugging, heel-seat nailing, and other machines for inserting metallic fastenings;

2. That machines of the types and for the purposes of those above enumerated are absolutely necessary for the production of the leading and best kind of machine-made boots and shoes, known as the welt shoe;

3. That because of the provisions and obligations in the leases of the United Shoe Machinery Company, relating to machines employed in the manufacture of welt work,

a) A lessee of the company's welt sewing machine must lease the company's outsole stitching machine as one of the conditions of obtaining the welt sewing machine, and that *all* of the lessee's welt sewing and outsole stitching *must* be done on the company's machines;

b) A lessee of the company's outsole stitching machine must lease the company's welt sewing machine as one of the conditions of obtaining the outsole stitching machine, and that *all* of the lessee's outsole stitching and welt sewing *must* be done on the company's machines;

c) A lessee of the company's lasting machine must lease the company's welt sewing, outsole stitching, heel slugging, heel-seat nailing, and such other

[1] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 158.

[2] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, p. 258. Charles H. Jones, president of the Commonwealth Shoe and Leather Company, and Mr. Louis D. Brandeis, who had resigned as director of the United Shoe Machinery Company in 1906, and had ceased to act as its counsel in 1909, were prominent in the alliance from the beginning. Mr. Brandeis became legal adviser of the alliance in 1911, and subsequently appeared in its behalf before several Congressional committees. Senate Interstate Commerce Committee Hearings, February 24, 28, 1912, Part XXX, p. 2618.

machines as he may require for inserting metallic fastenings, as one of the conditions of obtaining the lasting machine, and that *all* of the lessee's lasting, welt sewing, outsole stitching, heel slugging, heel-seat nailing, and all other required metallic fastening operations *must* be done on the company's machines;

d) A lessee of the company's heeling machine must lease the company's welt sewing, outsole stitching, lasting, heel slugging, heel-seat nailing, and such other machines as he may require for inserting metallic fastenings, as one of the conditions of obtaining the heeling machine, and that *all* of the lessee's heeling, welt sewing, outsole stitching, lasting, heel slugging, heel-seat nailing, and all other required metallic fastening operations *must* be done on the company's machines;

e) A lessee of the company's heel slugging, heel-seat nailing, and other machines for inserting metallic fastenings in welt boots and shoes must lease the company's welt sewing, outsole, stitching, and lasting machines as a condition of obtaining the heel slugging, heel-seat nailing, and other machines required for inserting metallic fastenings in welt boots and shoes, and that *all* of the lessee's heel slugging, heel-seat nailing, and all other metallic fastening operations required for welt boots and shoes—welt sewing, outsole stitching, and lasting—*must* be done on the company's machines.[1]

The single issue, therefore, is whether the "tieing" clauses in the United Shoe Machinery Company's leases are economically justified.

V

"For the last twenty-five years," said the Supreme Court of the United States (*United States* v. *Winslow*, 227 U.S. 202, 215), "practically all the shoes worn in the United States have been made by the help of machines grouped as lasting machines, welt-sewing machines and outsole-stitching machines, heeling machines, and metallic fastening machines, there being a large variety of machines in each group." These are the machines referred to in the second proposition above quoted, as being absolutely "necessary for the production of the leading and best kind of machine-made boots and shoes."

The aggregate rentals from all these machines are six cents per pair on the most expensive shoes, two and two-thirds cents per pair on the average grade of shoes, and on Goodyear turn shoes, McKay shoes, Standard screw and loose-nailed shoes—about

[1] *Discussion of Shoe Machinery: The Real Issue*, Weekly Bulletin Publishing Co., 1911, pp. 69–73; quoted in House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 63–64.

164,000,000 shoes out of the total annual production—less than one and one-third cents per pair.[1] These are the rentals from "the machines of the United Shoe Machinery Company," enumerated in the first proposition above quoted, "from which it derives its greatest income."

Welt-sewing and outsole-stitching machines, mentioned in the third proposition above quoted, have always been the two chief machines, each complementary of the other, in the Goodyear system. Long before the organization of the United Shoe Machinery Company, these two machines were always put out on "tied" leases.

The "tieing" clauses in these leases simply require that—

the leased machinery shall be used only in the manufacture of boots, shoes, and other footwear, known in the trade as "Goodyear welts," which are or shall be welted and the soles stitched on welt-sewing and stitching machines . . . . leased to the lessee by the lessor . . . . or in the manufacture of boots, shoes, or other footwear known in the trade as "Goodyear turns" the soles of which are or shall be attached to their uppers by turn sewing machines . . . . leased to the lessee by the lessor.[2]

These "tieing" clauses have been explained by the president of the United Shoe Machinery Company:

It has been repeatedly asserted that a shoe manufacturer cannot lease any of the company's machines without agreeing to take all his machines from the company, that he is thus completely in the company's control, so far as his machinery equipment is concerned. This statement is not true and it never was true. . . . . In constructing a Goodyear welt shoe, which is the highest type of shoe now generally worn, the indispensable machines which the company supplies exclusively are the Goodyear welt and the Goodyear stitching machines. These are the machines by which the sole and the upper are sewed together after the manner in which they would be sewed by hand. In signing a lease for the use of these two machines the shoe manufacturer does not agree to lease or buy any other machines from the company, and he may obtain all the rest of his machinery equipment from other companies if he finds elsewhere machines which he likes.[3]

[1] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 154–55.

[2] Senate Interstate Commerce Committee Hearings, January 25, 26, 27, 29, 30, 31, 1912, Part XXV, pp. 2190–91.

[3] House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 193.

Subdivision *a*) of the third proposition above quoted must, accordingly, be considered in the light of this fact.

Lasting machines, mentioned in the third proposition above quoted, following the practice established long before the organization of the United Shoe Machinery Company, are also put out on "tied" leases. The "tieing" clauses of these clauses require that—

> the leased machinery shall not . . . . be used in the manufacture or preparation of any welted boots, shoes, or other footwear . . . . which have been or shall be welted . . . . or the soles stitched . . . . by the aid of any welt-sewing or sole-stitching machinery not held by the lessee under lease from the lessor, or in the manufacture or preparation of any turned shoes or other footwear . . . . the soles of which have been or shall be . . . . attached to these uppers by the aid of any turn sewing machinery not held by the lessee under lease from the lessor, or in the manufacture of any boots, shoes, or other footwear which have been or shall be . . . . pulled over, slugged, heel-seat nailed, or otherwise partly made by the aid of any pull-over or "Metallic" machinery not held by the lessee under lease from the lessor.[1]

Analogous "tieing" clauses appear in the leases of heeling, heel-slugging, heel-seat-nailing, and other metallic fastening machines mentioned in the third proposition above quoted.[2]

The company's explanation of the situation is this:

> In addition to the Goodyear welting and stitching machines the company has perfected a series of more than 20 auxiliary machines which have been especially designed to reduce the cost or improve the quality of operations in the manufacture of a Goodyear welt shoe and which a shoe manufacturer can use in connection with the Goodyear welting and stitching machines without the payment of additional royalty, the only charge being a nominal annual rental, which is no more than sufficient to reimburse the company for the depreciation of these machines. In short, the company furnishes the Goodyear welter and stitcher and over 20 auxiliary machines for a royalty of substantially 4 cents per pair of shoes in the manufacture of men's Goodyear welts and 3 cents per pair in the manufacture of women's Goodyear welts. In view of the fact that the company receives no profit from the use of the auxiliary machines it of course expects the shoe manufacturer who takes them to use them only in conjunction with the welter and stitcher from which it

[1] Senate Interstate Commerce Committee Hearings, January 25, 26, 27, 29, 30, 31, 1912, Part XXV, p. 2172.

[2] Senate Interstate Commerce Committee Hearings, January 25, 26, 27, 29, 30, 31, 1912, Part XXV, pp. 2170–2250.

receives its profit; but the shoe manufacturer is not obliged to take them and if he finds machines more to his liking anywhere for doing the work of the auxiliary machines he can get those machines wherever he chooses. The company makes a great variety of machines for performing different operations in different kinds of shoes and any manufacturer can use the company's most important machines without being obliged to use any other machine which the company makes.[1]

VI

This brings into view this significant fact: "Tieing" clauses in shoe machinery leases seem to have been the practical device, and, so far as appears, the only practicable device, by which the United Shoe Machinery Company—and for years its predecessors before it—could make certain that benefits intended for and justly accruing to the lessees of the remunerative machines should not be appropriated by those who do not use the remunerative machines. Only by withholding from non-users of its remunerative machines its offer to lease accessory machines at nominal rentals has the United Shoe Machinery Company apparently been able to award this intended premium exclusively to those customers whose rentals for the remunerative machines constituted the chief income of the company.

Mr. Brandeis has brought this out in his analysis of the company's business:

> The machines manufactured and put out by the United Shoe Machinery Company may be divided broadly into two classes, namely, special-department machines, of which there are 102, and general-department machines, of which there are 117.
>
> The special-department machines, of which the Goodyear welter and stitcher, the lasting, and metallic fastening machines are examples, are the important machines on which the business of the company rests, and which the company considers its specialty. Substantially all of these 102 machines embody one or more inventions covered either by unexpired patents or by pending applications owned or controlled by the company. The aggregate number of such inventions owned or controlled by it is 1,173. These special-department machines are leased only—that is, none of them are sold. Some of the special-department leases limit the lessee to the use of the machines in connection with other special-department machines. Others of the special-department leases permit the machines to be used in connection with any

[1] House Judiciary Committee Hearings, January 26, 27, Fébruary 19, 1912, pp. 193–94.

other machine in the market. In some cases, as with the metallic machines, two distinct forms of leases are offered—the ordinary lease and the independent lease. Under one of the ordinary forms of lease the lessee is limited to the use of the machine in connection with other special-department machines. Under the independent lease the lessee is free to use the machine with any other machines in the market; but the independent lease requires of the lessee a royalty 10 per cent higher than the ordinary-form lease. The provisions in leases vary also according to whether the lessee makes an initial premium payment as $300 in some Goodyear leases, or pays only royalty. No special-department lease requires the lessee to use the machine in connection with any general-department machine.

Of the general-department machines, each performs some step in the manufacture of footwear for which competing machines are on the market. Of these 117 machines in the general-department, only 36 are patented. Any of these 117 machines may be either purchased of the company at substantially the same price as the company's competitors charge for similar machines, or it may be leased. If any general-department machine is purchased, it may be used in connection with any other machine whatsoever employed in shoe manufacturing. If, on the other hand, it is leased, the lessee is limited to use it in connection with special-department machines leased from the company. Most manufacturers prefer to lease general-department machines, because thereby they obtain the use of these machines at a less cost than if they purchased them.[1]

Mr. Brandeis in his analysis has brought out the real significance of these "tieing" clauses:

In these facts the gross inaccuracy of the sweeping statement that a shoe manufacturer is prevented by the terms of each United Company's lease from using any machine of a competitor is well illustrated. . . . In the process of making Goodyear welt shoes, which are the ordinary $3.50, $4, or $5 shoes sold by Douglas or Hanan, the shoe manufacturer uses generally, besides the welter and stitcher, 58 distinct machines, which the shoe manufacturer can obtain from the United Shoe Company, besides others in which the United Shoe Company does not deal. The welter attaches the inner sole to the upper and welt. The stitcher attaches the outer sole to the welt. These are fundamental machines in the Goodyear welt system, and the lessee of a welter may not use a competing stitcher, nor the lessee of a stitcher a competing welter, but as to the other 58 machines used in connection with a stitcher and welter in the manufacture of a Goodyear shoe the shoe manufacturer has the absolute liberty either to purchase or lease any or all of them from any other machinery manufacturers who make similar machines. If

[1] See House Judiciary Committee Hearings, January 26, 27, February 19, 1912, pp. 125–26.

he takes from the United Company any one or all of these 58 machines, it is not because he is obliged to do so in order to get the stitcher and the welter, but because the terms which the United Company makes for them are so much more favorable than other shoe machinery manufacturers, or the machine which it furnishes is so much better than that furnished by other shoe manufacturers, or the care and attention which he gets from the company's roadmen is so much better than that of any other manufacturer that he finds it to his advantage to use the United Company's machines.[1]

VII

Conceding that "tieing" clauses are necessary, if accessory machines are to be offered at unremunerative rentals only to customers leasing the remunerative machines, what is the company's economic justification for offering any machines on what, individually considered, would be an unremunerative basis? Why should not the company sell or lease each of its machines free from "tieing" clauses, charge its price for it, and let it go at that?

Mr. Brandeis has answered these identical questions:

> If we do not have this clause in certain of the leases where we have it, we could not sell certain things we do sell, we could not lease certain things which we do lease at as low a price as we do. It is only on account of the volume of business that we are able to undersell other people. When you cut down that value, when you cut down the amount of business that the agent is going to look after in a particular factory, what we are going to manufacture, it would make it impossible for us to make low prices and make the same profit that we are making.[2]

The Supreme Court of the United States, in the case above quoted, made by implication the same answer: "The disintegration aimed at by the statute does not extend to reducing all manufacture to isolated units of the lowest degree. It is as lawful for one corporation to make every part of a steam engine and to put the machine together as it would be for one to make the boilers and another to make the wheels" (*United States* v. *Winslow*, 227 U.S. 202, 218).

[1] See House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 126.

[2] See House Judiciary Committee Hearings, January 26, 27, February 19, 1912, p. 121.

But the practical answer, on which the United Shoe Machinery Company's economic justification depends, is that shoe-production-service can be supplied only as a substantial entirety.

Why is it [the counsel for the United Shoe Machinery Company propounded] that the United Shoe Machinery Company tie their machines together? It is just exactly for this reason: Because by so doing they are able in the first place to produce the highest ultimate results, so far as efficiency is concerned. They know that their machines that are all operated together, constituting one organism, will, as a matter of efficiency, produce more pairs of boots and shoes in 24 hours and 365 days than any other combination of machines. They do not constitute one article; there is no physical connection, but they operate together as one whole.[1]

If the system were broken up and this 5½-cent royalty for every pair of men's shoes and this 4½-cent royalty on every pair of women's shoes were reduced to 1½ cents (for some of the machines and 3 and 4 cents for others) in each case, the United Shoe Machinery Company would be absolutely unable to spend the $1,000,000 and over each year that it spends for road agents, the $1,000,000 it spends every year for experts in inventing and developing machines, and the large sums it spends in education. It would have to withdraw from the position of engineer, of expert, of inventor for all of these shoe manufacturers and come right down to the position . . . . of a company which makes a machine now and then, sells it, and never sends anybody to see if it is taken care of. That is not what any shoe manufacturer wants.[2]

RICHARD ROE

[*To be continued*]

[1] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, p. 162.

[2] House Judiciary Committee Hearings, February 20, 21, 22, March 1, 1912, pp. 139-40.